



**DRUG ACCOUNTABILITY/  
INVENTORY INTERFACE  
(DA)  
INSTALLATION GUIDE**

Version 3.0  
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## Introduction

The Drug Accountability/Inventory Interface (DA) V. 3.0 software package provides functionality to maintain perpetual inventory of drugs. The package is broken into two methods of obtaining data for purchased drugs. They are the Generic Inventory Package (GIP) Interface and the Prime Vendor Interface. If the GIP method is chosen by the facility, the Prime Vendor Interface post-installation instructions do not need to be followed. But, if the facility chooses the Prime Vendor Interface, both post-interface instructions must be followed. This is due to the fact that all drugs cannot be purchased from the prime vendor. Those drugs must be received in through the GIP Interface.

## Intranet

Documentation for this product can now be found on the Intranet. You will find it at the following address:

[http://www.vista.med.va.gov/softserv/clin\\_bro.ad/index.html](http://www.vista.med.va.gov/softserv/clin_bro.ad/index.html)

This address will take you to the Clinical Products page where you will find a listing of all the clinical software manuals. Click on the Drug Accountability/Inventory Interface Prime Vendor Interface (DA) link and it will take you to the DA Homepage. You can also get there by going straight to the following address:

[http://www.vista.med.va.gov/softserv/clin\\_nar.row/pharmda/index.html](http://www.vista.med.va.gov/softserv/clin_nar.row/pharmda/index.html)



Remember to bookmark this site for future reference.

## Package Requirements

<u>Application</u>	<u>Minimum Version Required</u>
Controlled Substances (CS)	3.0 (Must be patched up to and including Patch PSD*3.0.*6)
Kernel	8.0
Kernel Toolkit	7.3
MailMan	7.1
VA FileMan	21.0
National Drug File (NDF)	3.16
Pharmacy Data Management (PDM)	1.0
<input checked="" type="checkbox"/> Inpatient Medications	4.5 (Must be patched up to and including Patch PSJ*4.5*44)
<input checked="" type="checkbox"/> Automatic Replenishment/Ward Stock	2.3
● Outpatient Pharmacy	6.0 (Must be patched up to and including Patch PSO*6.0*155)

If the site will be setting up an Inpatient and/or Combined (Inpatient/Outpatient) pharmacy location, these software packages must be installed to collect unit dose and IV dispensing data.

● If the site will be setting up an Outpatient and/or Combined (Inpatient/outpatient) pharmacy location, this software package must be installed to collect prescription data.

<u>Commercial Software Package</u>	<u>Required Version</u>
PROCOMM PLUS®	2.01

The PROCOMM PLUS® software is not included in this package and MUST BE INSTALLED to ensure complete functionality of the prime vendor interface.

# Installation

Contact you local Customer Service for the Drug Accountability/Inventory Interface V. 3.0 software. If the facility will be interfacing with the prime vendor, call the prime vendor to request their software that places the invoice data on Pharmacy's prime vendor Personal Computer (PC).

## VISTA Software Installation

For all facilities installing this software, Drug Accountability/Inventory Interface and Controlled Substances users should be off the system while installing the package.

It is recommended that the software be installed in a test UCI prior to installing in a production environment. The user must receive the "Install Completed" notification before using the package.



The post install in the KIDS installation reads the DRUG file's (#50) NDC field (#31). It converts the NDC to a 12-digit number, adds a SYNONYM multiple, and writes the 12-digit NDC to the SYNONYM field (#.01). This is done for all drugs in the file. The total installation at test sites have been from 1-4 minutes depending on their system. Because the DRUG file (#50) is widely used by all Pharmacy software packages, it is recommended that DA be install during non-peak hours.

1. DUZ must be defined and valid, and DUZ(0) must be equal to "@" before installing the software.
2. If your site maps PSAGIP\* routines, turn off mapping. Once the DA software is installed, you can re-map these routines.
3. Delete all PSA\* routines.

## Example of Install

```
Select OPTION NAME:      EVE          Systems Manager Menu
Select Systems Manager Menu Option:  Programmer Options
Select Programmer Options Option:    Kernel Installation & Distribution
System
Select Kernel Installation & Distribution System Option:      Installation
Select Installation Option:  Load a Distribution
Enter a Host File:  DA3_0.KID

KIDS Distribution saved on Sep 12, 1997@15:57:03
Comment: Drug Accountability/Inventory Interface v3.0
```

```

This Distribution contains Transport Globals for the following Package(s):
  DRUG ACCOUNTABILITY 3.0

Want to Continue with Load? YES//  <RET>
Loading Distribution...

Want to RUN the Environment Check Routine? YES//  <RET>
  DRUG ACCOUNTABILITY 3.0
Will first run the Environment Check Routine, PSAENVIR

Use INSTALL NAME: DRUG ACCOUNTABILITY 3.0 to install this Distribution.

Select Installation Option:  Verify Checksums in Transport Global
Select INSTALL NAME:      DRUG ACCOUNTABILITY 3.0           Loaded from
Distribution 9/12/97@15:57:37
=> Drug Accountability/Inventory Interface v3.0 ;Created on Sep 12,
1997
DEVICE: HOME// [ Select Print Device]

PACKAGE: DRUG ACCOUNTABILITY 3.0      Sep 12, 1997 3:58 pm          PAGE 1
-----

114 Routine checked, 0 failed.

Select Installation Option:  Install Package(s)
Select INSTALL NAME:      DRUG ACCOUNTABILITY 3.0           Loaded from
Distribution 9/12/97@15:57:37
=> Drug Accountability/Inventory Interface v3.0 ;Created on Sep 12,
1997

This Distribution was loaded on Sep 12, 1997@15:57:37 with header of
Drug Accountability/Inventory Interface v3.0 ;Created on Sep 12,
1997@15:57:03
It consisted of the following Install(s):
DRUG ACCOUNTABILITY 3.0

  DRUG ACCOUNTABILITY 3.0
Will first run the Environment Check Routine, PSAENVIR

Install Questions for DRUG ACCOUNTABILITY 3.0

Incoming Files:

58.8      DRUG ACCOUNTABILITY STATS
Note: You already have the 'DRUG ACCOUNTABILITY STATS' File.

58.81     DRUG ACCOUNTABILITY TRANSACTION
Note: You already have the 'DRUG ACCOUNTABILITY TRANSACTION' File.

58.811    DRUG ACCOUNTABILITY ORDER

58.84     DRUG ACCOUNTABILITY TRANSACTION TYPE (including data)
Note: You already have the 'DRUG ACCOUNTABILITY TRANSACTION TYPE' File.
Want my data to overwrite yours? YES//  <RET>

```

```
Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES// <RET>
Enter options you wish to mark as 'Out Of Order': <u>PSA DRUG ACCOUNTABILITY
<u>MENU
    Drug Accountability Menu
Enter options you wish to mark as 'Out Of Order': <u>PSD MENU
Controlled Substances Menu
Enter options you wish to mark as 'Out Of Order': <RET>
Enter protocols you wish to mark as 'Out Of Order': <RET>
Delay Install (Minutes): (0-60): 0// <RET>
Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.
DEVICE: HOME// [Select Print Device]
Install Started for DRUG ACCOUNTABILITY 3.0 :
    Sep 12, 1997@15:59:32
Installing Routines:
    Sep 12, 1997@15:59:45
Installing Data Dictionaries:
    Sep 12, 1997@15:59:48
Installing Data:
    Sep 12, 1997@15:59:48
Installing PACKAGE COMPONENTS:
Installing SECURITY KEY
Installing PRINT TEMPLATE
Installing INPUT TEMPLATE
Installing OPTION
    Sep 12, 1997@16:00:02
```

```
DRUG ACCOUNTABILITY 3.0
-----
Running Post-Install Routine: ^PSAPOST
Copying the NDCs to the SYNONYM multiple in the DRUG file.
Copying NDCs is complete!
Updating Routine file...
The following Routines were created during this install:
Updating KIDS files...
DRUG ACCOUNTABILITY 3.0 Installed.
      Sep 12, 1997@16:00:17
NO Install Message sent
-----
100% |-----+
Complete | 25 50 75 |
-----+
Install Completed
```

## PROCOMM PLUS® Script Files Installation

PROCOMM PLUS® V. 2.01 must be installed on Pharmacy's prime vendor PC. It is suggested that it be installed in a PCPLUS directory. Drug Accountability/Inventory Interface V. 3.0 contains four script files (routine) as well as **VISTA** routines. These script files are executed within PROCOMM PLUS® to upload the data via MSKermit from the prime vendor PC into **VISTA**.

The following instructions will copy the DA script files from the "Drug Accountability/Inventory Interface V. 3.0 Script Files" diskette to the Pharmacy prime vendor PC then install them. There are two sets of instructions for copying the files. Use the first set if your PROCOMM PLUS® software resides in a PCPLUS directory. Use the other set if your PROCOMM PLUS® software resides in a directory with another name.

<b>Copy files to the PCPLUS directory.</b>	
	1. Get to the MS DOS prompt. It doesn't matter what directory you are in.
<b>A: &lt;RET&gt;</b>	2. Type the floppy drive name, a colon, then press the Return key.
<b>INSTALL &lt;RET&gt;</b>	3. Type "INSTALL" then press the Return key. The new script files will be copied to the PCPLUS directory.

### OR

<b>Copy files to a directory not named PCPLUS.</b>	
	1. Get the MS DOS prompt. It doesn't matter what directory you are in.
<b>A: &lt;RET&gt;</b>	2. Type the floppy drive name, a colon, then press the Return key.
<b>COPY INSTAL.* C:\mydirectory\ INSTAL.* &lt;RET&gt;</b>	3. Enter the following command, but replace " <i>mydirectory</i> " with the name of the directory containing the PROCOMM PLUS® software. The script files will be copied to that directory.   Notice that "INSTAL" has only one "L".  COPY<spacebar> INSTAL.*<spacebar>C:\ <i>mydirectory</i> \INSTAL.*
<b>C: &lt;RET&gt;</b>	1 Type "C", a colon, then press the Return key.
<b>CD\mydirectory &lt;RET&gt;</b>	2 Enter the following command replacing " <i>mydirectory</i> " with the name of your PROCOMM PLUS® directory.  CD\mydirectory

<b>Enter PROCOMM PLUS® then install the DA files.</b>	
<b>PCPLUS &lt;RET&gt;</b>	1 Type "PCPLUS" then press the Return key. The terminal will beep and display the following prompt:  PRESS ANY KEY TO ENTER TERMINAL MODE
<b>&lt;RET&gt; &lt;RET&gt;</b>	2 Press the Return key two times.
<b>&lt;ALT&gt; (F5)</b>	3 Hold down the Alternate key (ALT) and press the (F5) key. A box will appear.
<b>Instal &lt;RET&gt;</b>	4 Type "INSTAL" and press the Return key.   Notice that "INSTAL" has only one "L".

<b>Exit PROCOMM PLUS®.</b>	
<b>&lt;ALT&gt; X</b>	1 While holding down the Alternate (ALT) key, press "X".
<b>&lt;RET&gt;</b>	2 Press the Return key when the "Exit to DOS? (Y/N) Yes" box is displayed.

# Post-Installation

## Security Keys

The security keys listed below control the access necessary to operate the DA software.

### GIP and Prime Vendor Interfaces

The following keys should be assigned to the Chief of Pharmacy or a designee.

**PSAMGR** This security key locks the *Balance Adjustments* [PSA BALANCE ADJUSTMENTS], *Credit Resolution* [PSA CREDIT RESOLUTION], and *Transfer Drugs Between Pharmacies* [PSA TRANSFER DRUGS] options.

**PSJ RPHARM** This security key is used to identify pharmacists who can dispense and receive drugs. Only holders of this security key can verify invoices containing drugs marked as a controlled substance, transfer drugs between pharmacy locations, set stock and reorder levels in master vaults, and receive mail messages listing drugs below their reorder level in the master vaults.

### Prime Vendor Interface Only

These keys should be assigned to the Chief of Pharmacy, or a designee, and the Pharmacy purchasing agent.

**PSA ORDERS** This security key locks the *Orders Menu* [PSA ORDERS MENU]. Only holders of this key can upload, process, verify, and print invoice. It also allows the holder to enter credit memos against invoices.

## Add Option to the User sign-on event

*User sign-on event*

### **[XU USER SIGN-ON]**

This is a protocol option that links other packages that want to know about a user sign-on event.

*Prime Vendor Processing/Verifying Alerts at Signon*

### **[PSA ORDERS ALERT]**

This option checks to see if the user signing on the system holds the PSA ORDERS key. If so, it checks for any invoices that need to be processed or verified by a user. A message is displayed stating the number of invoices the user needs to process and/or verify. The option calls the PSALOGON routine.

This option must be added as an item to *User sign-on event* [XU USER SIGN-ON] in the OPTION file (#19). Routine PSALOGON must be moved to the system where this signon option resides.

## Assign menus to DA Users

### **GIP Interface**

If the site will only interface with the Generic Inventory Package (GIP), the *GIP Interface Menu* [PSA GIP INTERFACE MENU] must be distributed to Chief of Pharmacy or a designee. It contains the following menus.

#### *GIP Interface Menu*

- 1 *Connection Menu (DRUG file/ITEM MASTER file) ...*
- 2 *Pharmacy Location Maintenance Menu ...*
- 3 *Receipts Menu ...*
- 4 *Dispensing Menu ...*
- 5 *Maintenance Reports Menu ...*

## **Prime Vendor Interface**

If the site will interface with the prime vendor invoice data, the *GIP Interface Menu* [PSA GIP INTERFACE MENU] and *Prime Vendor Interface Menu* [PSA PRIME VENDOR INTERFACE] must be distributed. Most drugs will be purchased from the prime vendor. For the drugs that cannot be purchased from the prime vendor, it is necessary to interface with the Generic Inventory Package to receive them into pharmacy location and/or master vault. Therefore, the main menu, *Drug Accountability Menu* [PSA DRUG ACCOUNTABILITY MENU] must be distributed to Chief of Pharmacy, or a designee, plus the purchasing agent in Pharmacy.

### *Drug Accountability Menu*

- 1 *GIP Interface Menu ...*
- 2 *Prime Vendor Interface ...*

## Schedule Nightly Background Jobs

When Pharmacy is ready for dispensing updates from other Pharmacy software packages to Drug Accountability, the following background jobs must be scheduled. The *All Location Dispense/Purge* [PSA IV ALL LOCATIONS] option should NOT be scheduled within one hour of the *Update AMIS Stats File* [PSGW UPDATE AMIS STATS] option to avoid locks of the ^PSD global. It SHOULD be scheduled after the *Compile IV Costs in Background* [PSJI BACKGROUND JOB] option to gather up-to-date IV dispensing data.

### Update AMIS Stats File [PSGW UPDATE AMIS STATS]

This option is a background job scheduled to run each night. The purpose of the option is to loop through the “temporary” inventory global and move the data into the AMIS sub-file. The rescheduling frequency for this option is one day.

### Compile IV Costs in Background [PSJI BACKGROUND JOB]

Statistical data is stored in a “holding area” each time an IV label is printed. This option should be queued to run nightly to compile and merge this information into the IV statistics file (50.8), and delete any data which is over 100 days old.

### All Location Dispense/Purge [PSA IV ALL LOCATIONS]

The *All Location Dispense/Purge* [PSA IV ALL LOCATIONS] option should be scheduled via TaskMan to run nightly to update all Drug Accountability locations with dispensing from the IV STATS (#50.8), PRESCRIPTION (#52), and the UNIT DOSE PICK LIST STATS (#57.6) files. It also searches all active pharmacy locations and master vaults for drug balances equal to or less than the reorder level if drug balances are maintained in the location or vault. A mail message containing these drugs is sent to all holders of the PSA ORDERS key. To avoid competing locks of ^PSD globals, it should not be scheduled within one hour of the *Update Amis Stats File* [PSGW UPDATE AMIS STATS] option and after the *Compile IV Costs in Background* [PSJI BACKGROUND JOB] option.

### Suggested schedule

NAME: PSGW UPDATE AMIS STATS
QUEUED TO RUN AT WHAT TIME: SEP 24, 1997@23:30
RESCHEDULING REFREQUENCY: 1D
NAME: PSJI BACKGROUND JOB
QUEUED TO RUN AT WHAT TIME: SEP 25, 1997@01:00
RESCHEDULING REFREQUENCY: 1D
NAME: PSA IV ALL LOCATION
QUEUED TO RUN AT WHAT TIME: SEP 25, 1997@02:00
RESCHEDULING REFREQUENCY: 1D

# Resource Requirements

## Hardware Requirements

The prime vendor PC in Pharmacy must be hardwired to **VISTA** via a serial port.

## Disk Storage

This version of Drug Accountability/Inventory Interface V. 3.0 contains 112 routines. These routines require approximately 490,985 disk space. To obtain the size of each routine you can execute `D ^%RSIZE` then enter `PSA*`.

```
>D ^%RSIZE
Determine size of routines
routine(s) ? > PSA*
searching directory ...
routine(s) ? > <RET>
```

## Files

This package requires 23 files in addition to those of the Kernel and other files to which it points. Information about all files, including these can be obtained by using the VA FileMan to generate a list of file attributes. Please refer to the Technical Manual/Security Guide for a list of these files.

## Routine Mapping

Mapping is recommended for the `^PSAGIP*` routines.

## Global Journaling

Journaling is recommended for the `^PSD` global.